

10/21/2008

Claim Amendments:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1-13 (Canceled).

14. (Currently Amended) ~~An article~~ A wafer boat having a plurality of teeth for receiving a plurality of wafers, the wafer boat comprising recrystallized silicon carbide having a pore size of at least about 15 μm with a pore surface area of less than about 0.04 m^2/g and comprising impurities of iron, copper, nickel, chromium, and calcium at a total concentration of less than about 200 ppm.

Claims 15-22 (Canceled).

23. (Currently Amended) The ~~article~~ wafer boat of claim 14, wherein the recrystallized silicon carbide further comprises inert impurities.

Claims 24-29 (Canceled).

30. (Currently Amended) The ~~article~~ wafer boat of claim 14, wherein the ~~article is a wafer boat having~~ has pores interconnected to form a network and comprising an active impurity component at a concentration of less than 1 ppm, wherein the active impurity component is one of iron, copper, nickel, chromium, and calcium.

Claims 31-32 (Canceled)

33. (Currently Amended) The ~~article~~ wafer boat of claim 14, having a nickel concentration at or below 5 ppm.

34. (Currently Amended) The ~~article~~ wafer boat of claim 33, wherein the silicon carbide member is free of free silicon.

35. (Currently Amended) The ~~article~~wafer boat of claim 33, wherein the silicon carbide member has a Fe concentration at or below 2 ppm.

Claims 36-41 (Canceled).

42. (Withdrawn, Currently Amended) The wafer boat of claim 30, comprising:

a base plate;

a top plate;

a plurality of support rods disposed about a perimeter of the base plate and extending between the base plate and the top plate, each support rod of the plurality of support rods having a first distal end that is attached to the base plate and a second distal end that is attached to the top plate, each support rod including a plurality of slots, ~~formed therein that define~~wherein each slot is disposed between immediately adjacent teeth within the a plurality of teeth; and

a plurality of wafer supports, each of the plurality of wafer supports adapted to be received in a corresponding slot of each of the plurality of support rods, each of the plurality of wafer supports having a continuous open shape and including a pair of leg sections that form an interference fit with at least two of the plurality of support rods.

Claim 43 (Canceled)

44. (Withdrawn) The wafer boat of claim 42, wherein the plurality of support rods includes first, second, and third support rods, the first and second support rods being disposed approximately one hundred and eighty degrees apart from one another about the perimeter of the base plate, and the third support rod being disposed on the perimeter of the base plate approximately ninety degrees apart from the first and second support rods.

45. (Withdrawn) The wafer boat of claim 44, wherein the top plate has a generally circular shape having a central hole formed therein, the top plate including an expansion slot that extends radially outward from the central hole in the top plate and through an outer periphery of the top plate.

46. (Withdrawn, Currently Amended) The wafer boat of claim 45, wherein each of the plurality of wafer supports includes a continuous flat member having an open shape, the continuous flat member including a plurality of inter-connected arcuately curved sections, two of the arcuately curved sections defining an arc of approximately ninety degrees and adapted to support a wafer of the plurality of wafers at approximately a $0.7R$ boundary region of the wafer where R is a radius of the wafer, each of the two arcuately curved sections being connected to a respective leg section of the pair of leg sections and terminating in a free distal end;

wherein each of the free distal ends is shaped to form the interference fit with a slot of a respective one of the at least two support rods.

47. (Withdrawn) The wafer boat of claim 46, wherein the top plate has a C-shape, and wherein an open end of the C-shape is aligned with the expansion slot in the base plate.

48. (Withdrawn) The wafer boat of claim 46, wherein the free distal ends of each continuous flat member are mitered to engage with the slot of a respective one of the at least two support rods along a line of contact.

49. (Withdrawn) The wafer boat of claim 42, wherein the plurality of support rods includes first, second, third, and fourth support rods, the first and second support rods being disposed approximately one hundred and eighty degrees apart from one another about the perimeter of the base plate, and the third and fourth support rods being disposed on the perimeter of the base plate at positions that are approximately equidistant from a position on the perimeter of the base plate that is spaced approximately ninety degrees apart from the first and second support rods.

50. (Withdrawn) The wafer boat of claim 42, wherein the plurality of wafer supports can be at least one of inserted in and removed from the plurality of slots formed in the plurality of support rods, and wherein the pair of leg sections of each of the plurality of wafer supports removably forms an interference fit with a respective one of the at least two of the plurality of support rods.

Claims 51-58 (Canceled)

59. (Currently Amended) ~~An~~ The wafer boat of claim 14, wherein the article ~~wafer boat~~
~~consisting~~ consists essentially of recrystallized silicon carbide having a pore size of at least about
15 μm with a pore surface area of less than about 0.04 m^2/g and comprising impurities of iron,
copper, nickel, chromium, and calcium at a total concentration of less than about 200 ppm.